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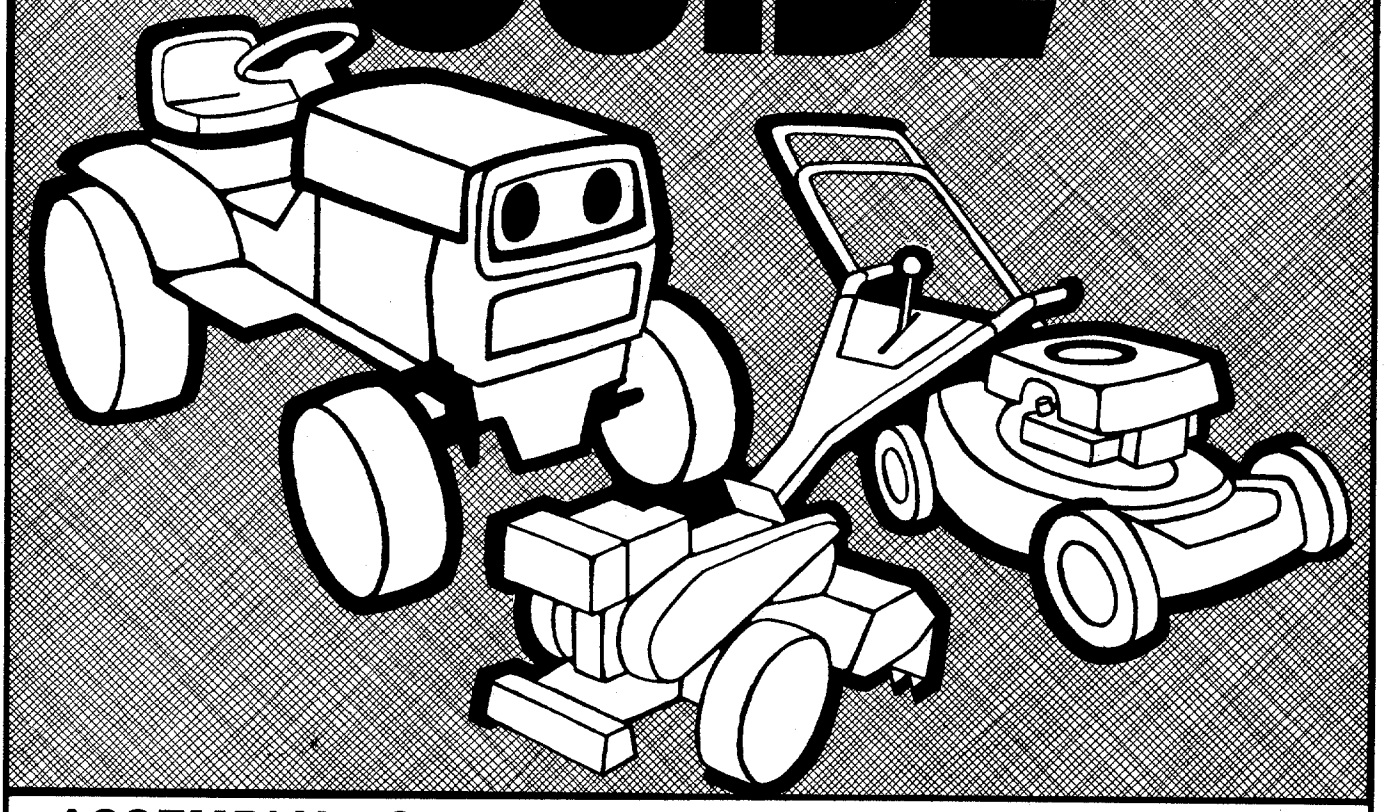
# OWNER'S GUIDE



**ASSEMBLY • OPERATION • MAINTENANCE • PARTS**

# 22" HI-WHEEL SELF PROPELLED ROTARY MOWER

**Important:**

**Read Safety Rules and Instructions Carefully**

**Model Number 121-550A**

Thank you for purchasing an American built product.

PRINTED IN U.S.A.

FORM NO. 770-0844

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# LIMITED WARRANTY

For one year from the date of original retail purchase, MTD PRODUCTS INC will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by MTD PRODUCTS INC.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or unless the unit has been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, motor, battery, battery charger or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

This warranty will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of MTD.

The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by MTD.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

**WARNING**

**TO PURCHASERS**
**OF INTERNAL COMBUSTION ENGINE EQUIPPED**
**MACHINERY OR DEVICES IN THE STATE OF CALIFORNIA**

The equipment which you have just purchased does not have a spark arrester. If this equipment is used on any forest covered land, brush covered land, or grass covered unimproved land in the State of California, before using on such land, the California law requires that a spark arrester be provided. In addition, spark arrester is required by law to be in effective working order. The spark arrester must be attached to the exhaust system and comply with Section 4442 of the California Public Resources Code.

**WARNING**

**To reduce the potential for any injury, comply with the following safety instructions. Failure to comply with the instructions may result in personal injury.**

# SAFE OPERATION PRACTICES FOR WALK-BEHIND MOWERS

## TRAINING

1. It is suggested that this manual be read in its entirety before attempting to assemble or operate this unit. Keep this manual in a safe place for future reference and for ordering replacement parts.
2. Your rotary mower is a precision piece of power equipment, not a plaything. Therefore, exercise extreme caution at all times.
3. Read this Owner's Manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
4. Never allow children to operate a power mower. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
5. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower. Although the area of operation should be completely cleared of foreign objects, a small object may have been overlooked and could be accidently thrown by the mower in any direction and cause injury.

## PREPARATION

1. Thoroughly inspect the area where the equipment is to be used. Remove all stones, sticks, wire, bones and other foreign objects which could be picked up and thrown by the mower in any direction and cause injury.
2. Do not operate equipment when barefoot or wearing open sandals. Always wear substantial footwear.
3. Do not wear loose fitting clothing that could get caught on the mower.
4. Check the fuel before starting the engine. Gasoline is an extremely flammable fuel. Do not fill the gasoline tank indoors, while the engine is running, or while the engine is still hot. Wipe off any spilled gasoline before starting the engine as it may cause a fire or explosion.
5. Disengage the self-propelled mechanism or drive clutch on units so equipped before starting the engine.
6. Never attempt to make a wheel or cutting height adjustment while the engine is running.
7. Mow only in daylight or in good artificial light.
8. Never operate the equipment in wet grass. Always be sure of your footing. Keep a firm hold on the handle and walk, never run.

## OPERATION

1. Do not change the engine governor settings or overspeed the engine. Excessive engine speeds are dangerous.
2. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times as the rotating blade can cause injury.
3. Stop the blade when crossing gravel drives, walks or roads.
4. After striking a foreign object, stop the engine, remove the wire from the spark plug, and thoroughly inspect the mower for any damage. Repair the damage before restarting and operating the mower.
5. If the equipment should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
6. Stop the engine whenever you leave the mower, before cleaning the mower housing, and when making any repairs or inspections.
7. When cleaning, repairing or inspecting, make certain the blade and all moving parts have stopped. Disconnect the spark plug wire, and keep the wire away from the plug to prevent accidental starting.
8. Before attempting to unclog the mower or discharge chute, stop the engine and be sure the blade has stopped completely. The cutting blade continues to rotate for a few seconds after the engine is shut off. Never place any part of the body in the blade area until you are sure the blade has stopped rotating. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
9. Do not run the engine indoors.
10. Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher or unclogging chute.
11. Mow across the face of slopes, never up-and-down. Exercise extreme caution when changing direction on slopes. Do not mow excessively steep slopes.
12. Always disconnect electric mowers (line operated) before cleaning, repairing or adjusting.
13. Never operate mower without proper guards, plates or other safety protective devices in place.
14. Keep washout ports and other mower-housing service openings closed when mowing.

## MAINTENANCE AND STORAGE

1. Check the blade and engine mounting bolts at frequent intervals for proper tightness.
2. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
3. Never store the equipment with gasoline in the tank inside of a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.
4. To reduce fire hazard, keep the engine free of grass, leaves, or excessive grease.
5. Check the grass catcher bag frequently for wear or deterioration. For safety protection, replace only with new bag meeting original equipment specifications.

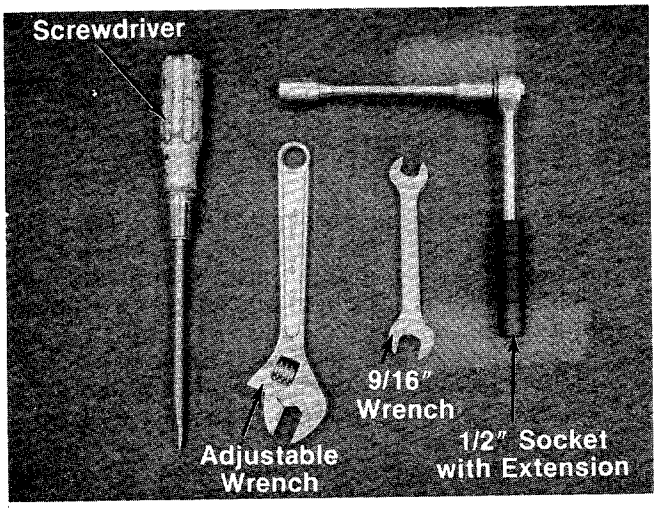



FIGURE 1.

# ASSEMBLY INSTRUCTIONS

**NOTE**

This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see operating section of this manual for proper fuel and engine oil recommendations.

**Tools Required:**

(1) Screwdriver
(1) Adjustable Wrench
(1) 9/16" Wrench
(1) 1/2" Socket Wrench with Extension

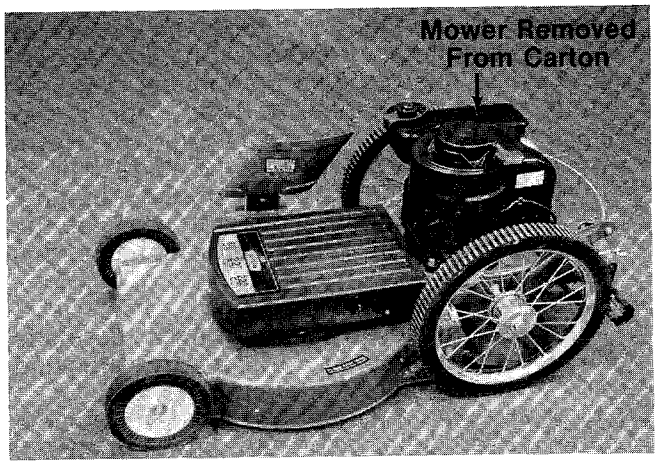



FIGURE 2.

1. Remove the lawn mower, loose parts, hardware pack and literature from the carton. Make certain all parts and literature have been removed before the carton is discarded.

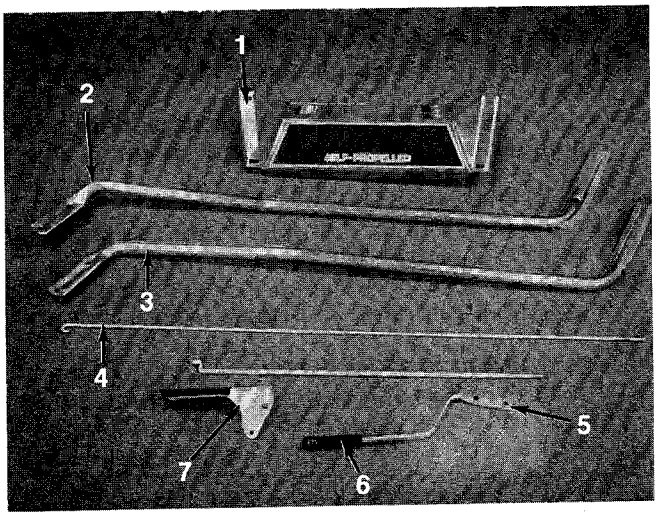



FIGURE 3.

**Loose Parts in Carton:**

1. Handle Panel
2. Left Hand Handle
3. Right Hand Handle
4. Drive Control Rod
5. Blade Control Rod
6. Clutch Lever
7. Clutch Grip

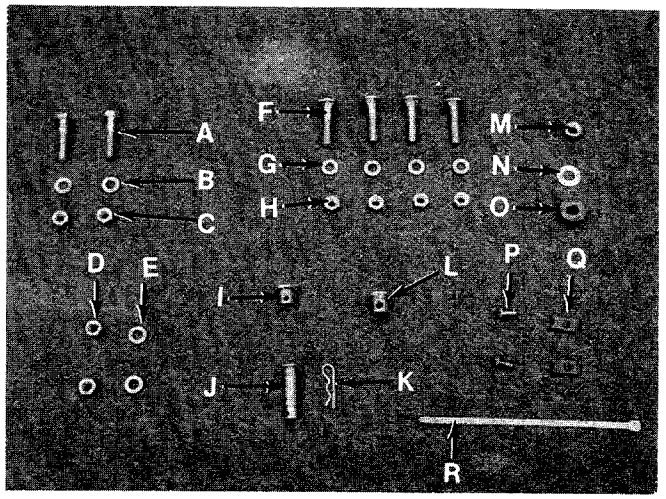



FIGURE 4.

**Contents of Hardware Pack:**

A (2) Hex Bolts 5/16-24 x 1.75" Long
B (2) Lock Washers 5/16" I.D.
C (2) Hex Nuts 5/16-24 Thread
D (2) Hex Nuts 5/16-24 Thread
E (2) Lock Washers 5/16" I.D.
F (4) Carriage Bolts 5/16-18 x 1.50" Long
G (4) Lock Washers 5/16" I.D.
H (4) Hex Nuts 5/16-18 Thread
I (1) Ferrule
J (1) Clevis Pin
K (1) Cotter Pin
L (1) Ferrule
M (1) Elastic Lock Nut 3/8-24 Thread
N (1) Flat Washer
O (1) Rubber Washer
P (2) Self-Tapping Screws .50" Long
Q (2) Speed Nuts
R (1) Cable Tie
S (2) Hand Grips (Not Shown)

2. Extend the throttle control assembly and lay on the floor. Be careful not to bend or kink control wire.

3. Place the left handle (2) over the two studs extending out from the left side of frame. See figure 5.

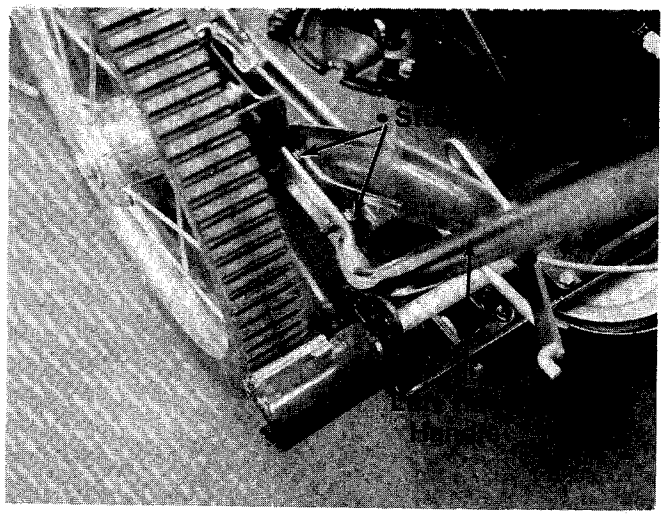


FIGURE 5.

**NOTE**

Reference to right hand and left hand of the mower is from the operator's position.

4. Start lock washers (E) and hex nuts (D) on studs by hand. Do not tighten.

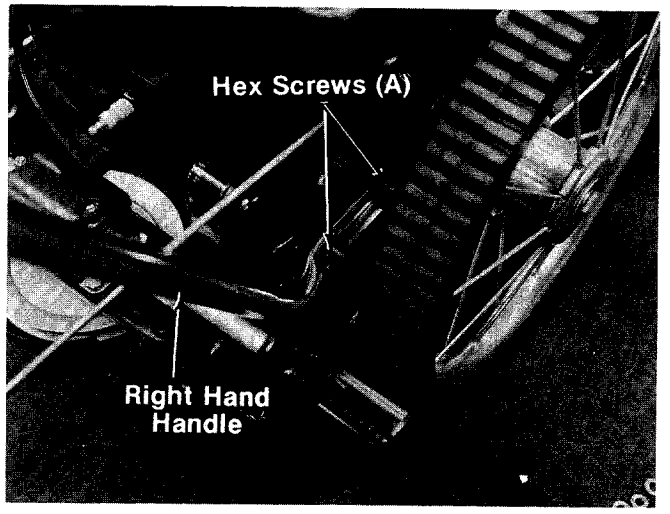
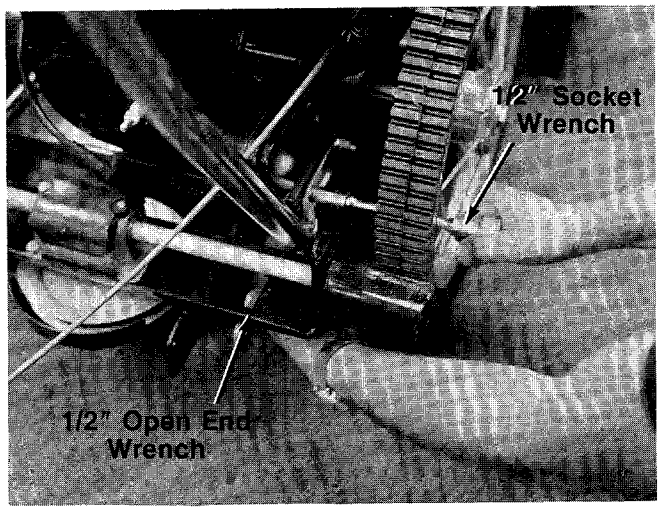


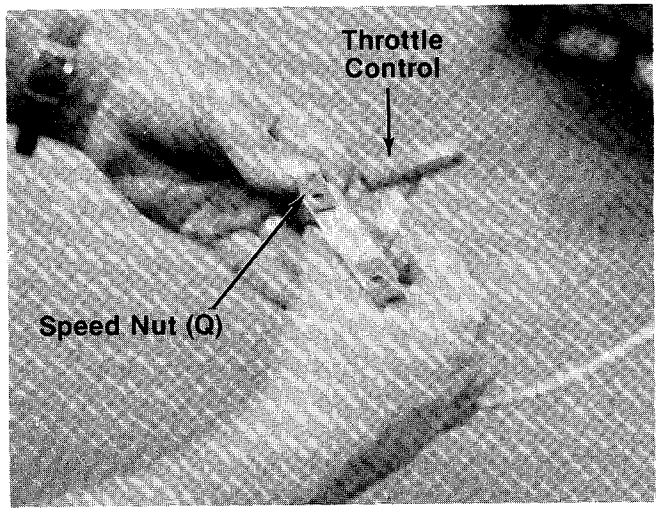

FIGURE 6.

5. Place the right handle (3) in position. Secure with hex bolts (A), lock washers (B) and hex nuts (C). Only tighten by hand. See figure 6.



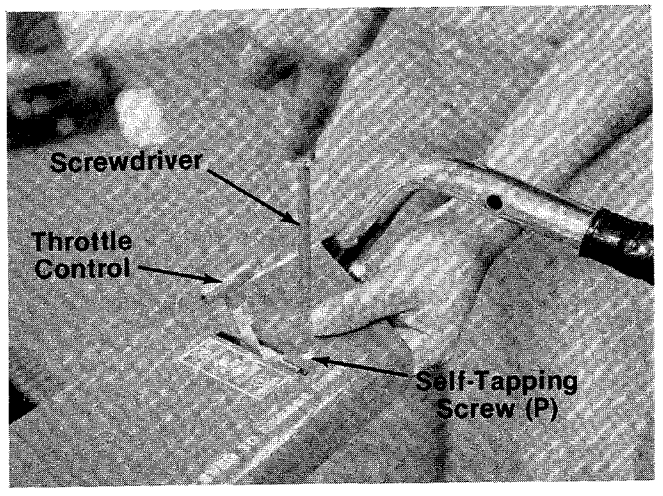

6. Bolt the handle panel (1) to the handles with four carriage bolts (F), lock washers (G) and hex nuts (H).
7. Now go back and tighten handle bolts with ½ inch socket wrench. See figure 7.
8. Slip hand grips (S) on the upper end of each handle. They will slip on more easily if you first soak them in warm, soapy water.

**FIGURE 7.**




9. Place the two speed nuts (Q) provided on the throttle control. See figure 8.

**FIGURE 8.**




10. Place the throttle control in handle panel and secure with two self-tapping screws (P). See figure 9.

***FIGURE 9.***

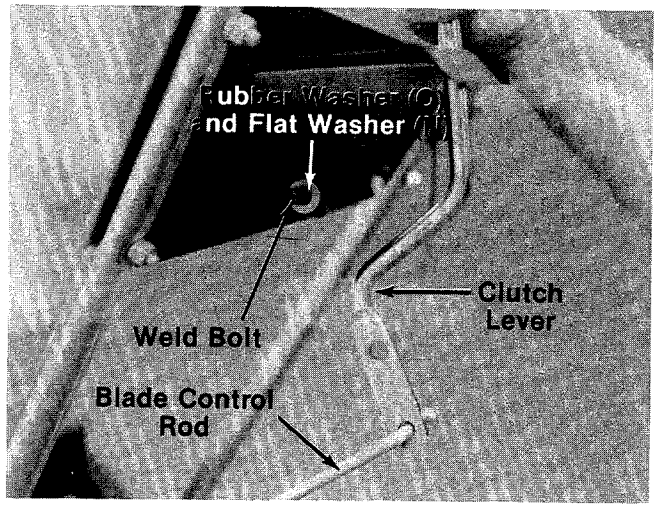



FIGURE 10.

11. Place rubber washer (O) over weld bolt on handle panel, then flat washer (N). See figure 10.
12. Place clutch lever (6) down through slot in handle panel as shown in figure 10.

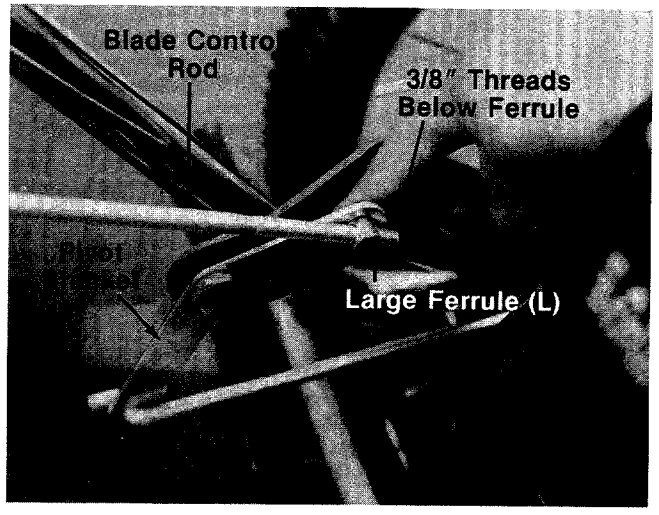



FIGURE 11.

13. Place large ferrule (L) in pivot bracket. Thread the blade control rod (5) into ferrule until approximately 3/8" of threads are showing below ferrule. See figure 11.

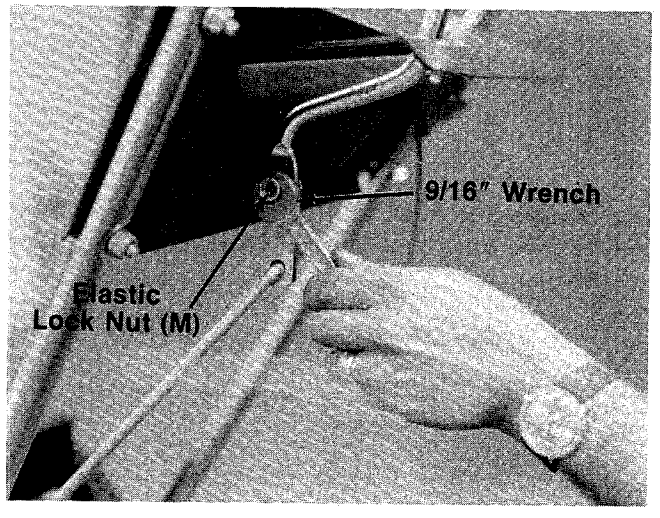



FIGURE 12.

14. Hook other end of blade control rod into clutch lever. See figure 10.
15. Place clutch lever over weld bolt on handle panel and secure with elastic lock nut (M). See figure 12. A 9/16" wrench is required.

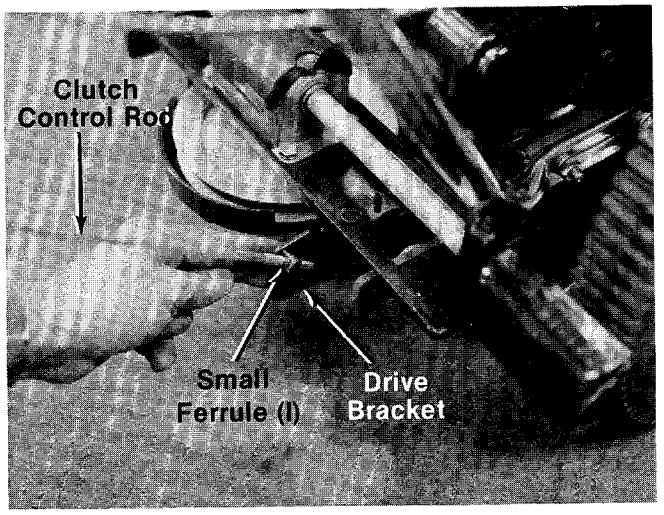



FIGURE 13.

16. Place small ferrule (I) in position on drive bracket. See figure 15. Thread clutch control rod (4) through ferrule until approximately one inch of threads show below ferrule. See figure 13.

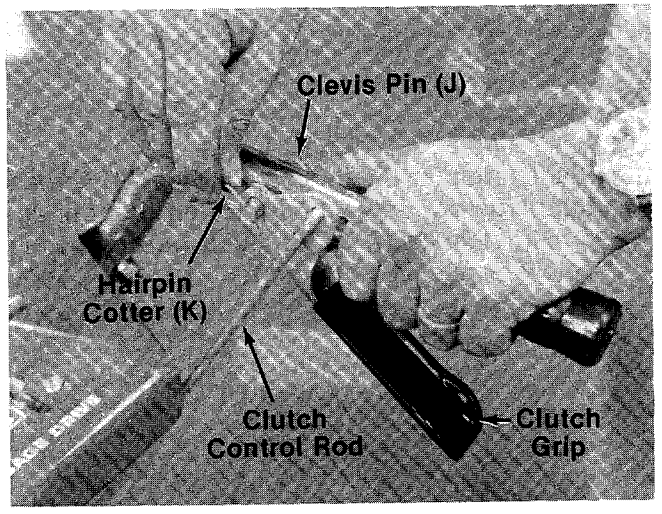



FIGURE 14.

17. Hook other end of clutch control rod into clutch grip (7). Secure clutch grip to right hand handle with clevis pin (J) and hairpin cotter (K). See figure 14.

**CAUTION**

Final adjustment of the clutch rod must be made before the engine is started. Final adjustment is covered in step 19.

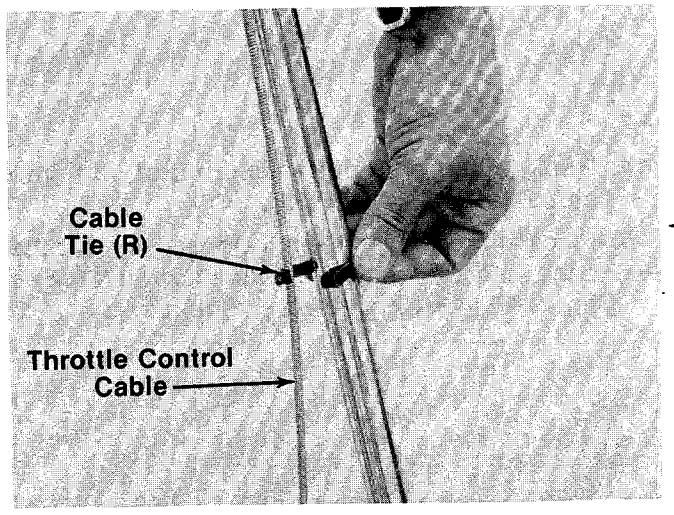



FIGURE 15.

18. Secure throttle control cable to right hand handle with cable tie (R) provided. See figure 15.

19. **Final Adjustment—Clutch (Engine Off)**
With the clutch grip released as shown in figure 14, there should be a minimum clearance of 1/8" between the drive pinions and wheels. With the clutch engaged (clutch grip squeezed), the pinions should engage solidly into the tread of the wheels.

If adjustment is needed, remove the cotter pin and clevis pin. Remove the clutch grip. If there is not 1/8" of clearance, unscrew the control rod from the ferrule a few turns. If the pinions do not engage solidly into the wheels, screw the control rod further into the ferrule.

Reassemble the clutch grip and check the adjustment. Repeat as necessary.

20. **Final Adjustment—Clutch (Blade Engagement) Lever**
Put the clutch lever in the "OFF" position. If the clutch lever cannot be pulled back into the "OFF" position, unhook the blade control rod from the clutch lever. Unscrew the rod from the ferrule a few turns. Reassemble and place clutch lever in "OFF" position. See figures 10, 11 and 12.

Start the engine (see operation section) and check the blade to see if it is turning. If the blade rotates, shut the engine off immediately. Remove the blade control rod from the clutch lever, and screw the rod in a few turns. Reassemble and test. Repeat if necessary.

# CONTROLS

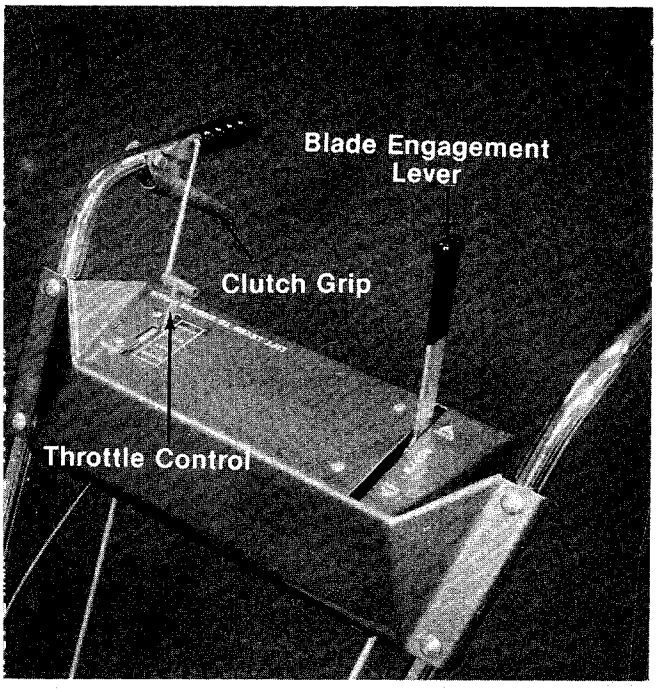



**FIGURE 16.**

**THROTTLE CONTROL**

The engine is equipped with a "Choke-a-Matic" choke. Push the throttle control lever all the way forward to activate the choke. Move the throttle control all the way back to stop the engine. The engine speed is regulated by moving the throttle control between the fast and slow position. See figure 16.

**DRIVE CLUTCH**

The clutch grip is located on the right handle. Squeeze the clutch grip to engage the pinions into the rear wheels and drive the mower. Release the clutch handle and the mower is free-wheeling. You must release the clutch handle when making a turn. See figures 16, 17 and 18.

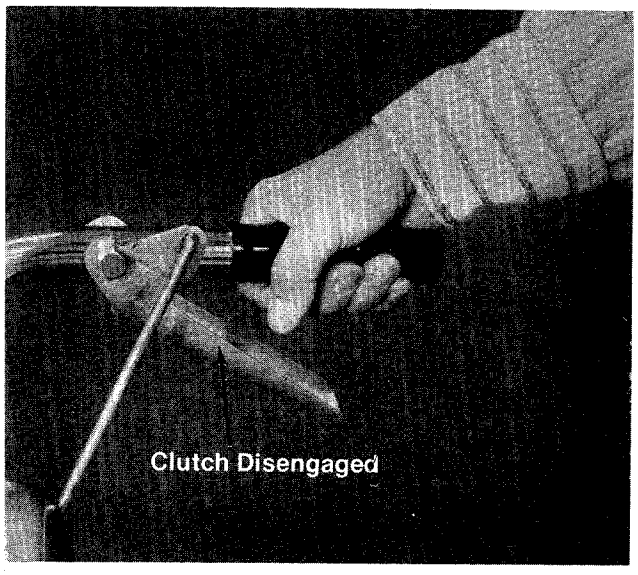



**FIGURE 17.**

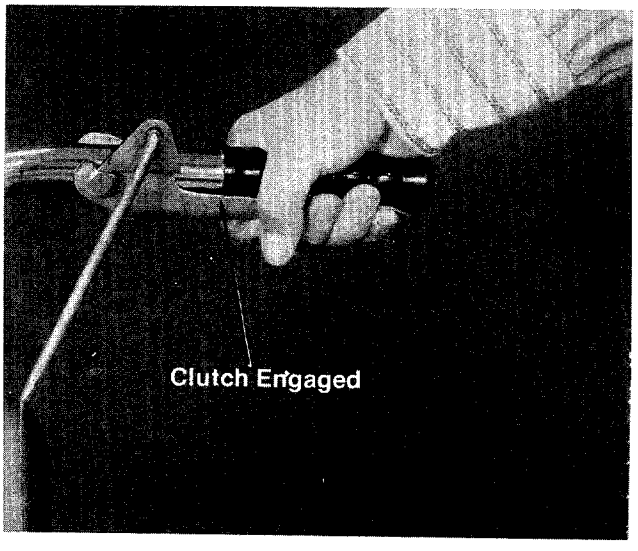



**FIGURE 18.**

**BLADE ENGAGEMENT LEVER**

The blade engagement lever is located on the left hand side of the handle panel. Move the blade engagement lever forward to engage the blades. Pull the lever towards you to shut off the blades. The blades should be shut off when starting the mower and moving the mower without cutting grass. See figure 16.

# OPERATION

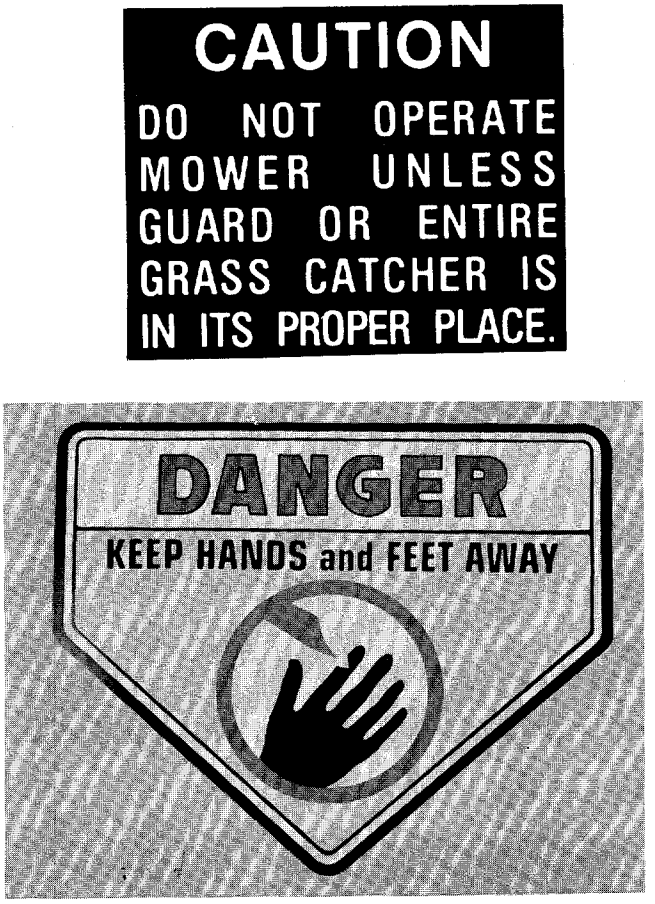



**FIGURE 19.**

Keep hands and feet away from the chute area on cutting deck. See figure 19.

**BEFORE STARTING**

1. Check the lubricant level in the gear box. The lubricant should cover the lower gear. It should be checked after each 25 hours of operation. See the lubrication section of this manual.
2. Check steps 19 and 20 of the Assembly Instructions to be sure the clutch and blade disengagement controls are working properly.
3. Fill sump with oil using a high quality detergent oil classified "For Service SC, SD, SE or MS." Nothing should be added to the recommended oil.

   Use SAE 30 oil. If not available, use SAE 10W or 10W-30 oil.

Place engine level. Remove oil filler plug. Fill the oil sump to point of overflow. Pour slowly. Capacity 1¾ pints.

4. Fill fuel tank, using clean, fresh, **regular** grade automotive gasoline. Fill tank completely.

   DO NOT MIX OIL WITH GASOLINE.

**TO START ENGINE**

1. Move the clutch (blade engagement) lever to the "OFF" position. See figure 16.
2. Move the throttle control to the "CHOKE" position. See figure 16.
3. From the left side opposite the discharge chute and with one foot on the deck, grasp the recoil starter handle and pull out rapidly. See figure 20. Allow the rope to rewind slowly. If the engine does not start after two or three tries, move the throttle control to the "FAST" position and try again.

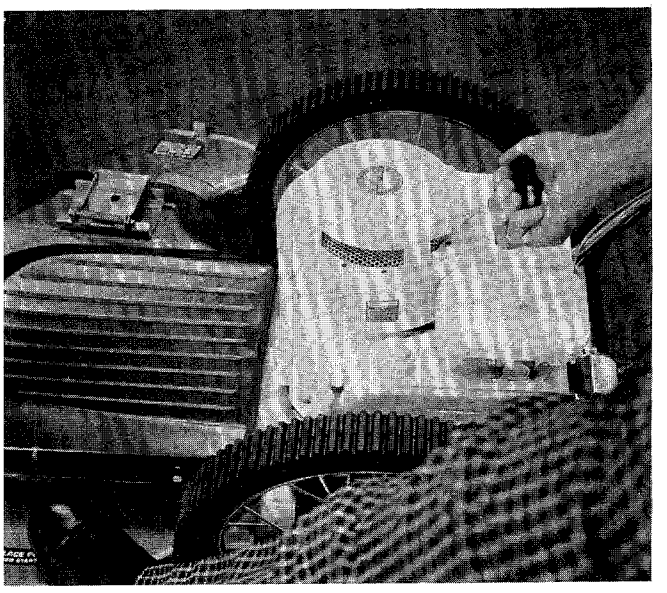


**FIGURE 20.**

4. After the engine starts, move the throttle control into the "FAST" position.
5. After starting, carefully observe to see if the blade belt is turning. If the blade belt rotates, shut the engine off immediately. Adjust as specified in step number 20 under assembly instructions.

### TO STOP

1. The engine is stopped by moving the throttle control lever to "STOP" position.
2. The blade is stopped by moving the clutch lever to the "OFF" position.
3. Ground movement is stopped by releasing the clutch handle.
4. Disconnect spark plug wire from the spark plug and ground to prevent accidental starting while equipment is unattended.

A brief break-in period is essential to insure maximum engine life. Run engine at half speed for one tank of gasoline. It is also recommended to change crankcase oil after the first five hours of operation. See maintenance section. Always check oil before operating the mower. BE SURE CRANKCASE IS FULL.

Fast engine speeds produce better cutting conditions. However, unit should be run at slower speeds until operator is thoroughly familiar with controls.

Never attempt to clean or make any adjustments with the engine running.

Proper lubrication must be maintained at all times.

Appropriate clothing should be worn when cutting brush or heavy weeds. Safety shoes and safety glasses are highly recommended.

**IMPORTANT**

After striking a foreign object, stop the engine. Remove wire from spark plug, thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.

# ADJUSTMENTS

**CAUTION**

Do not at any time make any adjustment to lawn mower without first stopping engine and disconnecting spark plug wire.

### CLUTCH ADJUSTMENT

To adjust the clutch, refer to step number 19 under assembly instructions.

### BLADE CLUTCH LEVER

To adjust the clutch lever, refer to step number 20 under assembly instructions.

### HEIGHT ADJUSTMENT

**WARNING**

Before changing the cutting height, stop the engine and disconnect the spark plug wire.

Unscrew the rear axle bolt and place it in one of the four height adjustment holes. The belleville washer must be installed exactly as shown in figure 21 (cupped side against the frame).

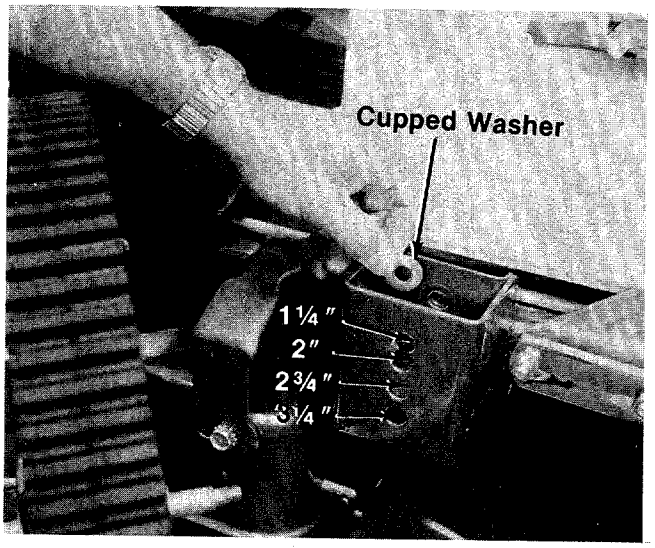



**FIGURE 21.**

Adjust the front wheels in the same manner. All wheels must be in the same relative position. See figure 22.

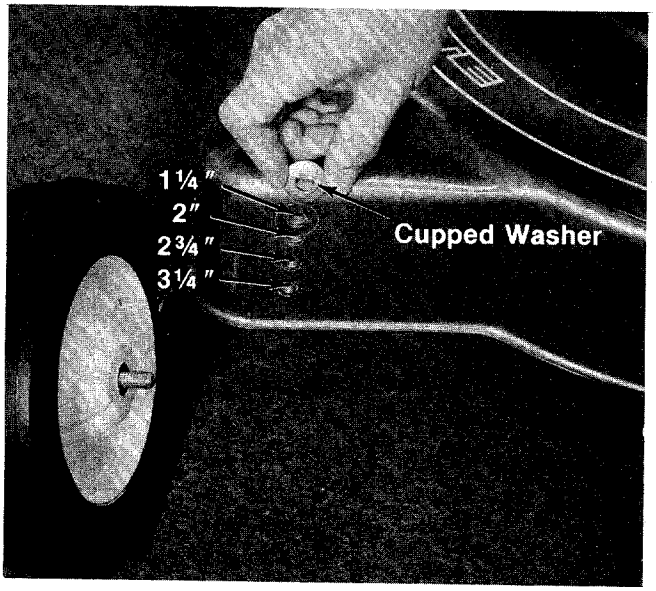



**FIGURE 22.**

### THROTTLE

If adjustment becomes necessary, the throttle control wire assembly can be reset as follows:

1. Loosen, but do not remove, screw securing throttle control wire assembly at engine. See figure 23.
2. Move throttle control lever on handle to "CHOKE" position.
3. Move lever, to which control wire is fastened at engine, to full open position. Retighten screw to secure throttle control wire assembly.

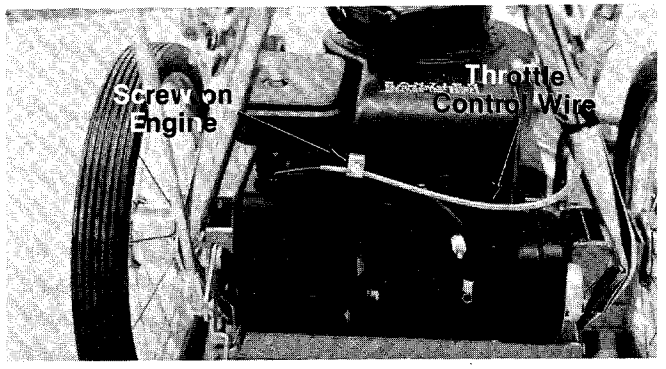



**FIGURE 23.**

**WARNING**

If any adjustments are made to the engine while the engine is running (e.g. carburetor), disengage all clutches and blades. Keep clear of all moving parts and be careful of heated surfaces and muffler.

### CARBURETOR ADJUSTMENTS (See figure 24.)

Minor carburetor adjustment may be required to compensate for differences in fuel, temperature, altitude and load.

**Initial Adjustment:**

Turn needle valve clockwise to close it. Then open 2 turns. This initial adjustment will permit the engine to be started and warmed up before making final adjustment.

**Final Adjustment:**

With engine running at normal operating speed (approximately 3000 RPM without load), turn needle valve clockwise until engine starts to lose speed (lean mixture). Then slowly turn needle valve counterclockwise past the point of smoothest operation, until engine just begins to run unevenly. This mixture will give best performance under load.

To check adjustment, move engine control from SLOW to FAST speed. If engine tends to stall or die out, it usually indicates that the mixture is slightly lean. It may be necessary to open the needle valve slightly to provide a richer mixture. This richer mixture may cause a slight unevenness in idling.

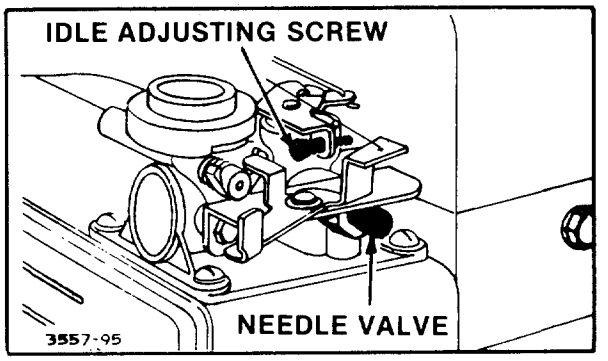



**FIGURE 24.**

# LUBRICATION

**IMPORTANT**

Always stop engine and disconnect spark plug wire before cleaning, lubricating, or doing any kind of work on the lawn mower.

**Rear Wheels**—Remove the two plastic plugs on the hub and lubricate with a few drops of engine oil once a season. Replace the oil plugs. See figure 25.

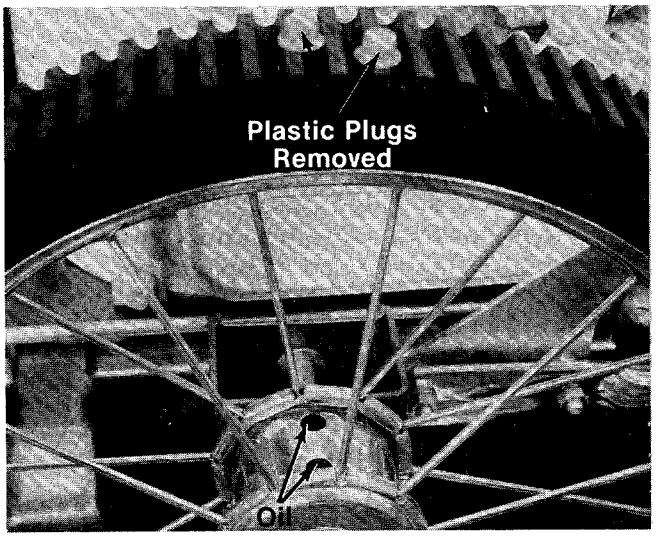



**FIGURE 25.**

**Front Wheels**—Lubricate with a few drops of engine oil once a season. See figure 26.

Also, if the wheels are removed for any reason, lubricate the surface of the axle bolt and the inner surface of the wheel with light oil. A 4 oz. plastic bottle of light oil lubricant is available. Order part number 737-0170. Engine oil may also be used.

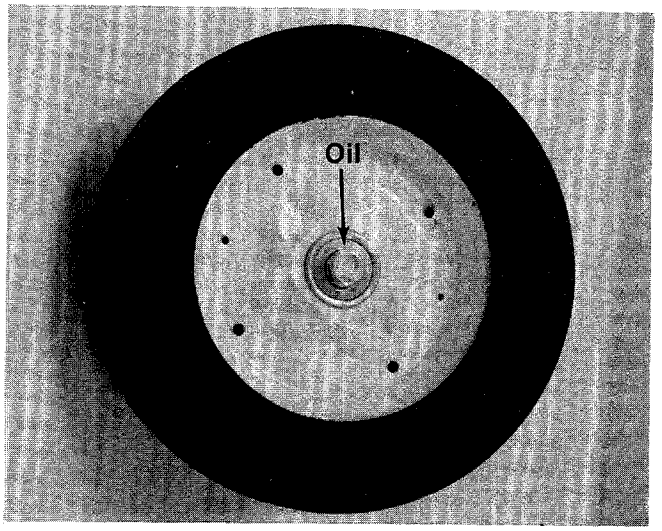



**FIGURE 26.**

**Pinion Bearings**—Lubricate with a few drops of engine oil once a season. See figure 27.

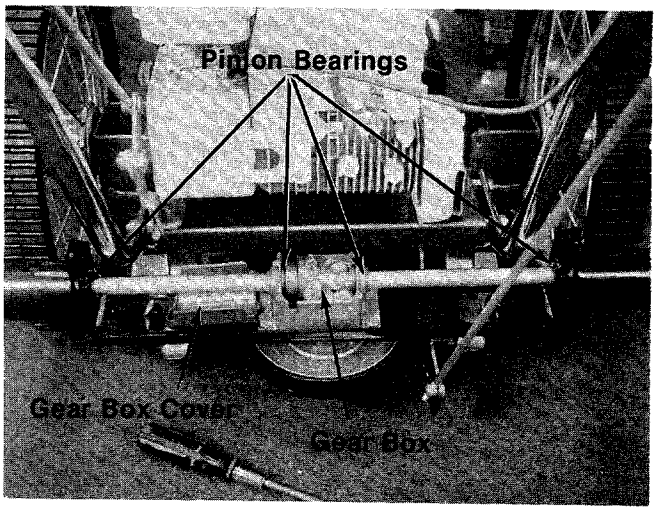



**FIGURE 27.**

**Blade Spindle Bearings**—They are sealed and require no further lubrication.

**Gear Box**—Remove the two screws and lift off the cover. The lubricant should cover the lower gear. Check after every 25 hours of operation. Use a high temperature (450°F.) grease. See figure 27.

**Throttle**—Periodically lubricate throttle control lever and throttle wire assembly with a few drops of light oil for ease of operation.

**Engine**—Follow engine manual for lubrication instructions.

**Chute Deflector**—The torsion spring and pivot point should be lubricated periodically with light oil to prevent any rust or binding. Deflector must work freely.

Oil all linkage such as the clutch and blade controls once a year with engine oil.

# MAINTENANCE

## CUTTING BLADE

### A. Removal for Sharpening or Replacement

**WARNING**

Be sure to disconnect and ground the spark plug wire before working on the cutting blade to prevent accidental engine starting.

1. Remove the large bolt and lock washer which holds the blade and adapter to the blade spindle. See figure 28.
2. Remove the blade and adapter from the spindle. Be careful not to lose the key on the spindle.
3. If the blade or blade adapter needs replacing, remove the two small bolts, lock washers and nuts which hold the blade to the adapter.

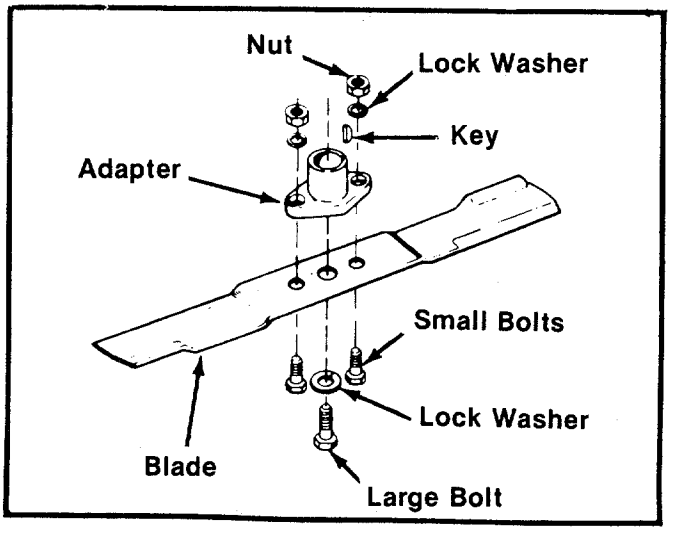



**FIGURE 28.**

### B. Sharpening

Remove the cutting blade by following the directions of the preceding section.

When sharpening the blade, follow the original angle of grind as a guide. It is **extremely important** that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds and may cause damage to the mower.

The blade can be tested for balance by balancing it on a round shaft screwdriver. Remove metal from the heavy side until it balances evenly. See figure 29.

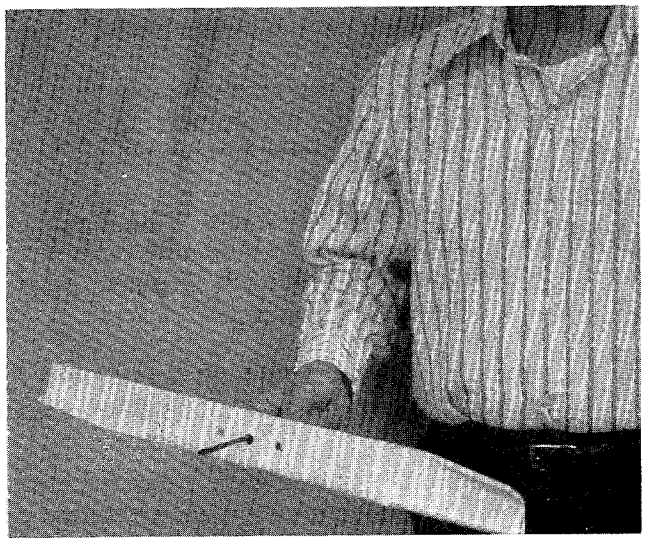


**FIGURE 29.**

**NOTE**

It is recommended that the blade always be removed from the adapter for the best test of balance.

### C. Reassembly

Before reassembling the blade and the blade adapter to the unit, lubricate the spindle and the inner surface of the blade adapter with light oil. Lubricating the bolt holes, bolts and inner surface of the nuts with light oil is also recommended. A 4 oz. plastic bottle of light oil lubricant is available. Order part number 737-0170. Engine oil may also be used.

When replacing the blade, be sure to install the blade with the side of the blade marked "Bottom" (or with part number) facing the ground when the mower is in the operating position. Make certain key is in place on the blade spindle.

Blade Mounting Torque

3/8" Dia. Bolt 375 in. lb. min., 450 in. lb. max.
5/16" Dia. Bolt 150 in. lb. min., 250 in. lb. max.

To insure safe operation of your unit, ALL nuts and bolts must be checked periodically for correct tightness.

### DECK

The underside of mower deck should be cleaned after each period of use as grass clippings, leaves, dirt and other matter will accumulate. This accumulation of grass clippings, etc., is undesirable as it will invite rust and corrosion and may cause an uneven discharge of grass clippings at the next cutting.

The deck may be cleaned by tilting the mower forward or on its side and scraping clean with a suitable tool or by washing with a stream of water from a garden hose.

**CAUTION**

Do not direct the stream of water at a hot engine as damage to the engine may result.

### ENGINE OIL

Check oil level before starting and after every 5 hours of operation or each period of use. Add oil as necessary to keep level full to point of overflowing.

Before removing oil fill plug, clean area around plug to prevent dirt from entering oil fill hole.

Engine should be in a level position when checking oil.

Change oil after first 5 hours of operation. Thereafter, change every 25 hours. Change oil while engine is warm. Oil may be drained through oil drain at the base of the engine or through oil fill hole. Oil capacity 1¾ pints.

### AIR CLEANER

Clean air cleaner and re-oil element every 25 hours under normal conditions. Clean every few hours under extremely dusty conditions. Poor engine performance and flooding usually indicates that the air cleaner should be serviced. See figure 30.

1. Remove screw.
2. Remove air cleaner carefully to prevent dirt from entering carburetor.
3. Take air cleaner apart and clean.
   a. WASH foam element in kerosene or a liquid detergent and water to remove dirt.
   b. DRY foam completely by wrapping and squeezing in a cloth.

c. SOAK foam with engine oil. Squeeze to distribute and remove excess oil.

4. Reassemble parts and fasten to carburetor.

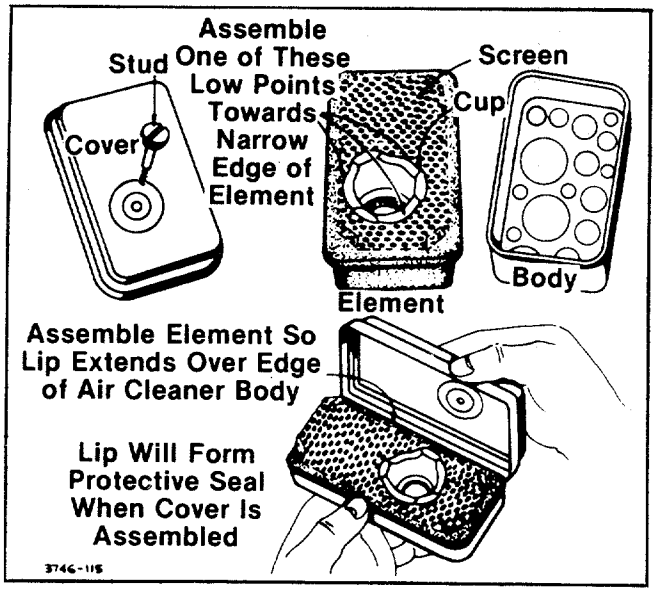



FIGURE 30.

## SPARK PLUG

The spark plug should be cleaned (see figure 31) and the gap reset to a 0.030-inch clearance once a season (see figure 32). Spark plug replacement is recommended at the start of each mowing season; check engine manual for correct plug type.

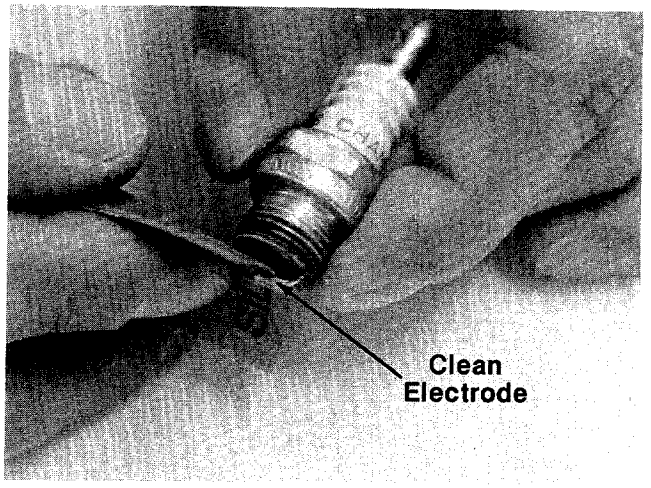



FIGURE 31.

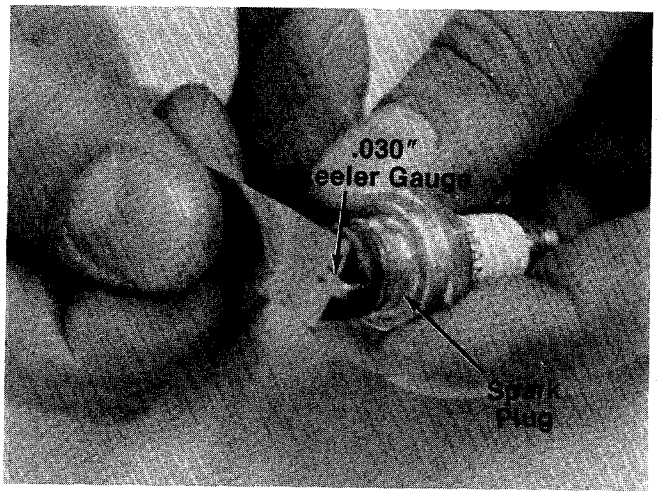



FIGURE 32.

**NOTE**

Whenever the spark plug is removed for cleaning, it is advisable to replace the spark plug gasket with a new gasket.

## BLADE BELT REPLACEMENT

The blade belt replacement may be made as follows:

1. Remove the blade spindle cover. See figures 33 and 34.
2. Remove the front belt guard.
3. Remove the blade tension spring.
4. Loosen the nut on the belt clip of the idler pulley.
5. Remove the brake lever assembly by removing the bolt and lock nut. See figure 34.
6. Remove the drive belt from the engine pulley. See figure 35.
7. Remove the damaged or worn belt.
8. Place the new blade belt on the engine pulley. Do not bend belt guard pins. Belt should be inside of pins.
9. Replace the drive belt on the engine pulley.
10. Work the belt to the front and mount it on the blade spindle pulley. Replace the front belt guard.
11. Replace the brake lever assembly.
12. Slip the belt on the idler pulley.
13. Replace the blade tension spring.
14. Move the blade clutch handle to the ON position.
15. Position the belt clip on the idler pulley to clear the tightened belt. Secure the belt clip in position with the nut. See figure 33.
16. Replace the blade spindle cover.

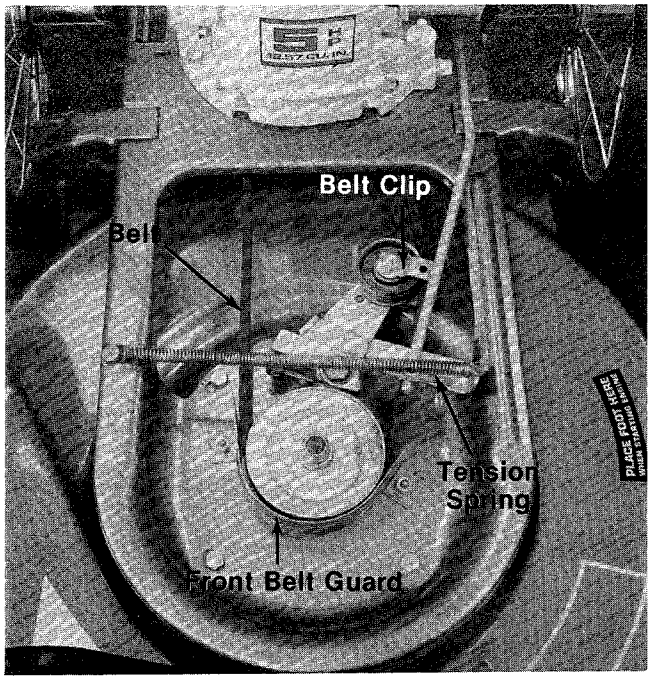



FIGURE 33.

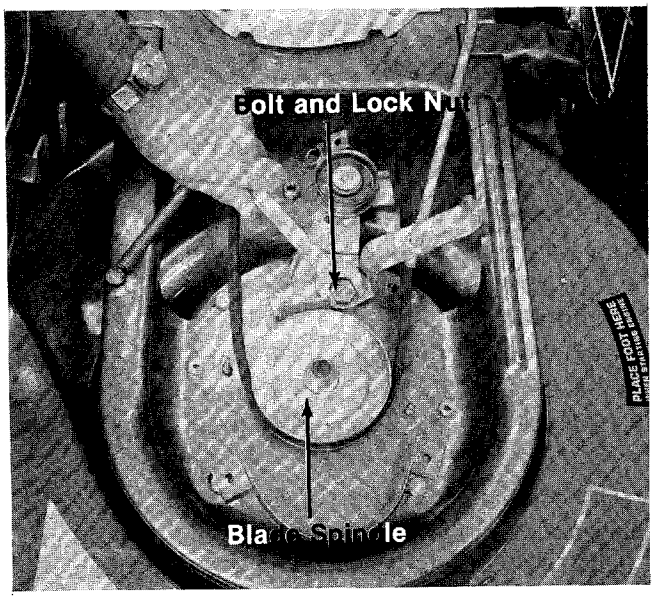



FIGURE 34.

**DRIVE BELT REPLACEMENT**

The drive belt replacement may be made as follows: (See figure 35)

1. Remove the bottom frame assembly.
2. Remove the pulley from the pinion shaft. Do not misplace pulley key on pinion shaft.
3. Remove and replace the drive belt.
4. When replacing the pulley, be sure the key is in place on the pinion shaft and that the small hub of the pulley faces up.
5. Replace the bottom frame assembly.

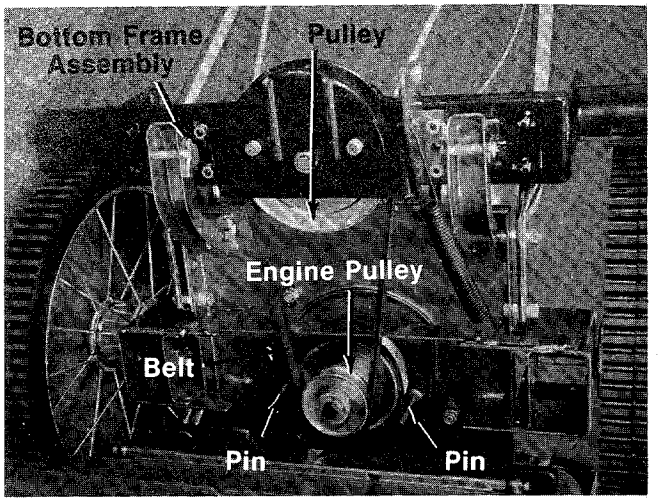



FIGURE 35.

**TROUBLE SHOOTING**

If a problem is encountered, refer to the chart on page 19.

# USING YOUR ROTARY MOWER

For the best results, do not cut wet grass because it tends to stick to the underside of the mower, thus preventing proper discharge of grass clippings. If wet grass must be cut, reduce walking speed to help distribute the clippings more effectively.

New grass should be treated as wet grass, otherwise a normal walking speed is about the right pace for efficient mowing.

The best mowing pattern is one that allows the clippings to discharge towards the uncut part of the lawn. This permits recutting of the clippings to further pulverize them. When cutting high weeds, discharge towards cut portion, then recut at right angles to first direction.

Lawn should be cut in the fall as long as there is growth.

# OFF-SEASON STORAGE

If the machine is to be inoperative for a period longer than 30 days, the following procedures are recommended:

1. Working outdoors, drain all fuel from the fuel tank. Use a clean dry cloth to absorb the small amount of fuel remaining in the tank. Then run the engine until all fuel in the carburetor is exhausted.

Do not drain fuel while smoking, or if near an open fire.

2. Drain all the oil from the crankcase (this should be done after the engine has been operated and is still warm). Refill the crankcase with clean new oil.
3. Disconnect the spark plug wire and remove the spark plug from the cylinder. Pour about 2 or 3 tablespoons of engine oil into the cylinder. Turn the engine over several times to spread out the oil. Replace the spark plug, but do not connect the wire.
4. Clean the engine and the entire mower thoroughly.
5. Lubricate all lubrication points.

**NOTE**

The use of any accessory on this Rotary Mower other than those manufactured by the mower manufacturer is **not** recommended.

GRASS CATCHER Model No. 191-003A is available as optional equipment for the mower shown in this manual.

**WARNING**

1. The mower should not be operated without the entire grass catcher or chute deflector in place.
2. The mower should not be operated without the protective shield on the rear of the deck in place.

**NOTE**

Under normal usage bag material is subject to wear and should be checked periodically. Be sure any replacement bag complies with the mower manufacturer's recommendations.

For replacement bags, use only factory authorized replacement bag No. 764-0176.

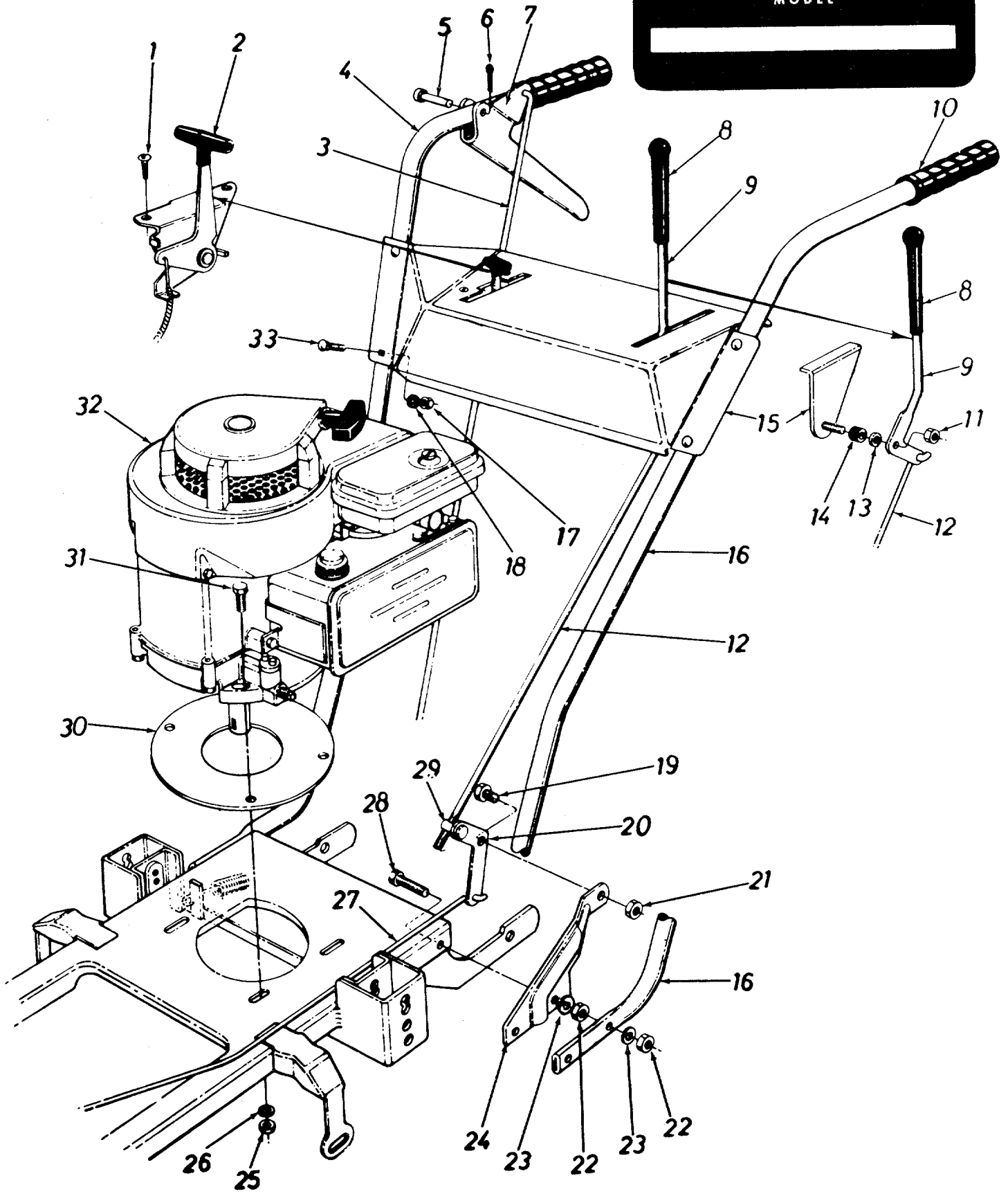
# TROUBLE SHOOTING CHART

| Problem | Cause | Remedy |
|---|---|---|
| 1 Engine fails to start | A Check fuel tank for gas<br>B Spark plug lead wire disconnected<br>C Throttle control lever not in the starting position<br>D Faulty spark plug<br>E Carburetor improperly adjusted<br>Engine flooded<br>F Old, stale gasoline | A Fill tank if empty.<br>B Connect lead wire.<br>C Move throttle lever to start position.<br>D Spark should jump gap between control electrode and side electrode. If spark does not jump, replace the spark plug.<br>E Remove spark plug, dry the plug, crank engine with plug removed and throttle in off position. Replace spark plug and lead wire. Resume starting procedures.<br>F Drain tank and refill with fresh gasoline. |
| 2 Hard starting or loss of power | A Spark plug wire loose<br>B Carburetor improperly adjusted<br>C Dirty air cleaner | A Connect and tighten spark plug wire.<br>B Adjust carburetor. See engine manual.<br>C Clean air cleaner as described in the engine manual. |
| 3 Operation erratic | A Dirt in gas tank<br>B Dirty air cleaner<br>C Water in fuel supply<br>D Vent in gas cap plugged<br>E Carburetor improperly adjusted | A Remove the dirt and fill tank with fresh gas.<br>B Clean air cleaner as described in the engine manual.<br>C Drain contaminated fuel and fill tank with fresh gas.<br>D Clear vent or replace gas cap.<br>E Adjust carburetor. See engine manual. |
| 4 Occasional skip (hesitates) at high speed | A Carburetor idle speed too slow<br>B Spark plug gap too close<br>C Carburetor idle mixture adjustment improperly set | A Adjust carburetor. See engine manual.<br>B Adjust to .030".<br>C Adjust carburetor. See engine manual. |
| 5 Idles poorly | A Spark plug fouled, faulty, or gap too wide<br>B Carburetor improperly adjusted<br>C Dirty air cleaner | A Reset gap to .030" or replace spark plug.<br>B Adjust carburetor. See engine manual.<br>C Clean air cleaner as described in the engine manual. |
| 6 Engine overheats | A Carburetor not adjusted properly<br>B Air flow restricted<br>C Engine oil level low | A Adjust carburetor. See engine manual.<br>B Remove blower housing and clean as described in the engine manual.<br>C Fill crankcase with the proper oil. |
| 7 Excessive vibration | A Cutter blade loose or unbalanced | A Tighten blade and adapter. |

# 121-550A

IF YOU WRITE TO US ABOUT THIS ARTICLE OR IF YOU ORDER REPLACEMENT PARTS ALWAYS MENTION THIS MODEL & SERIAL NO

MODEL



# 121-550A

## PARTS LIST FOR MODEL 121-550A

| REF. NO. | PART NO. | COLOR CODE | DESCRIPTION | NEW PART |
|---|---|---|---|---|
| 1 | 710-0224 | | Hex Self-Tap Scr. #10 x .50" Lg. | |
| | 712-0526 | | Speed Nut #10 (Not Shown) | |
| 2 | 746-0161 | | Throttle Control Ass'y.—Comp. | |
| 3 | 747-0165 | | Control Rod—Drive | |
| 4 | 749-0190 | | Handle—R.H. | |
| 5 | 711-0415 | | Clevis Pin .380 Dia. x 1.62" Lg. | |
| 6 | 714-0101 | | Cotter Pin—Internal ½" Dia. | |
| 7 | 12921 | | Clutch Grip Ass'y. | |
| 8 | 720-0143 | | Grip | |
| 9 | 747-0167 | | Clutch Lever | |
| 10 | 01166 | | Grip | |
| 11 | 712-0116 | | Hex Ins. Jam Nut 3/8-24 Thd. | |
| 12 | 747-0166 | | Control Rod—Blade | |
| 13 | 736-0300 | | Fl-Wash. | |
| 14 | 735-0126 | | Rubber Wash. | |
| 15 | 12594 | —462 | Handle Panel Ass'y. | |
| 16 | 749-0191 | | Handle—L.H. | |
| 17 | 712-0267 | | Hex Nut 5/16-18 Thd.* | |
| 18 | 736-0119 | | L-Wash. 5/16" I.D.* | |
| 19 | 738-0147 | | Shld. Bolt .500 Dia. x .170 | |
| 20 | 12596 | | Pivot Bracket | |
| 21 | 712-0181 | | Hex Top L-Nut 3/8-16 Thd. | |
| 22 | 712-0123 | | Hex Nut 5/16-24 Thd.* | |
| 23 | 736-0119 | | L-Wash. 5/16" I.D.* | |
| 24 | 12593 | | Pivot Mounting Bracket | |
| 25 | 712-0123 | | Hex Nut 5/16-24 Thd.* | |
| 26 | 736-0119 | | L-Wash. 5/16" I.D.* | |
| 27 | 747-0168 | | Control Rod—Idler | |
| 28 | 710-0409 | | Hex Bolt 5/16-24 x 1.75" Lg.* | |
| 29 | 711-0179 | | Ferrule | |
| 30 | 08325 | —462 | Belt Trap Ass'y. | |
| 31 | 710-0158 | | Hex Bolt 5/16-24 x 1.25" Lg.* | |
| 32 | — | | Engine | |
| 33 | 710-0262 | | Carriage Bolt 5/16-18 x 1.50" Lg.* | |

*For faster service, obtain standard nuts, bolts, and washers locally. If these cannot be obtained locally, order by part number and size as shown on parts list.

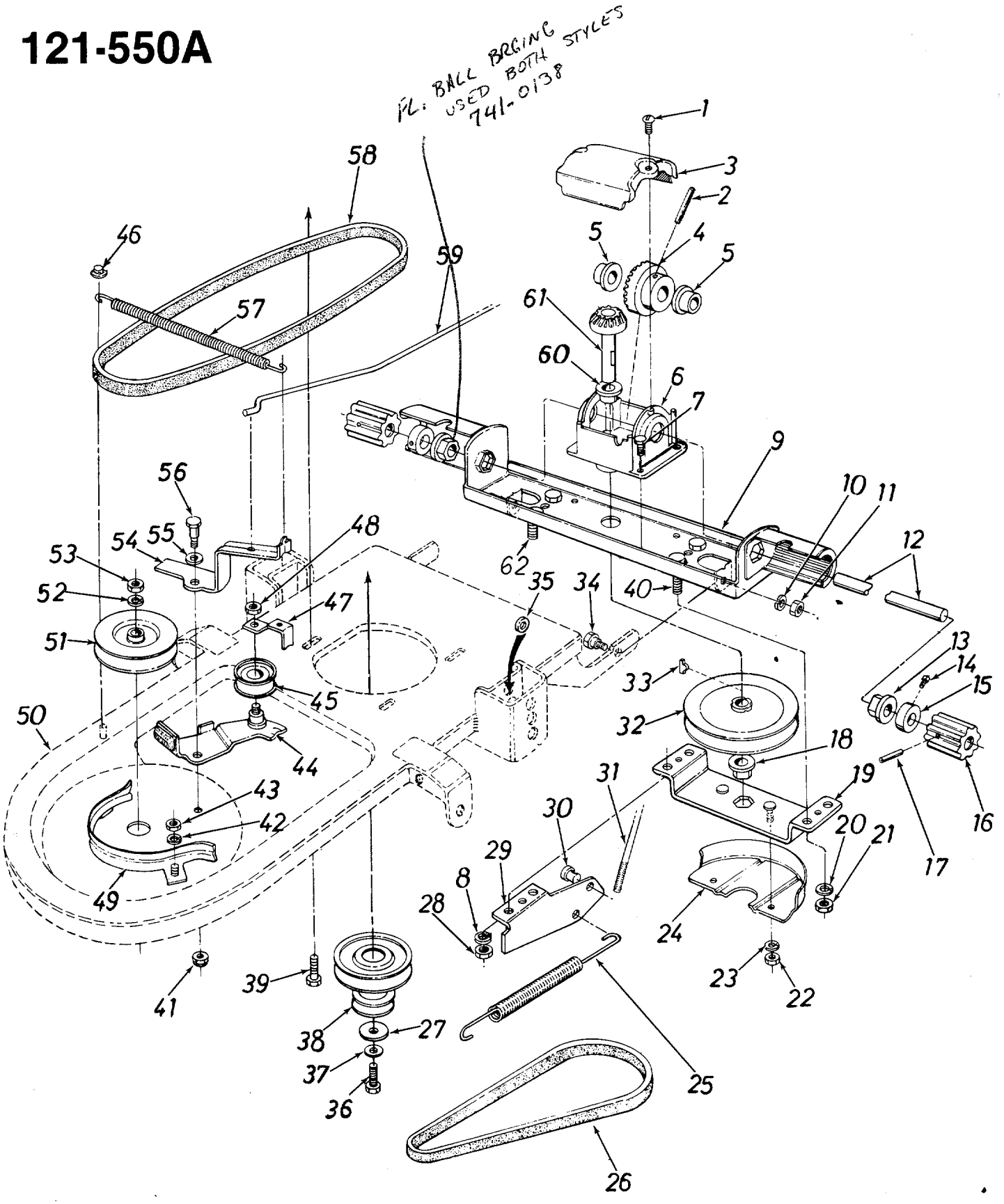
(462—Red Flake) When ordering parts, if color or finish is important, use the appropriate color code shown at left. (e.g. Red Flake Finish—11992 (462).)

**NOTE**

This instruction manual covers various models and all specifications shown do not necessarily apply to your model. Specifications subject to change without notice or obligation.

The engine is not under warranty by the mower manufacturer. If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines — Gasoline."

# 121-550A




Lubricate with 2 oz. High Temp. 450° F. Grease. Order Part No. 737-0120.

# 121-550A

## PARTS LIST FOR MODEL 121-550A

| REF. NO. | PART NO. | COLOR CODE | DESCRIPTION | NEW PART |
|---|---|---|---|---|
| 1 | 710-0148 | | Hex Wash. Hd. F-Tapp Scr. #8-32 x .38" Lg. | |
| 2 | 715-0246 | | Spring Pin Spiral .188 Dia. x 1.25" Lg. | |
| 3 | 08187 | —462 | Gear Box Cover | |
| 4 | 748-0135 | | Bevel Gear | |
| 5 | 748-0110 | | Flange Bearing .628 I.D.† | |
| 6 | 08189 | | Gear Box† | |
| 7 | 710-0776 | | Hex Self-Tap Scr. ¼-20 x .62" Lg. | |
| 9 | 12584 | —462 | Top Drive Frame Ass'y. | |
| 10 | 736-0169 | | L-Wash. 3/8" I.D.* | |
| 11 | 712-0798 | | Hex Nut 3/8-16 Thd.* | |
| 12 | 08348 | | Drive Shaft | |
| 13 | 748-0227 | | Flange Bearing .628" I.D. | |
| 14 | 710-0421 | | Set Scr. 5/16-18 x .25" Lg. | |
| 15 | 711-0169 | | Collar 5/8" I.D. | |
| 16 | 748-0182 | | Drive Pinion | |
| 17 | 715-0120 | | Spring Pin Spiral .188 Dia. x 1.00" Lg. | |
| 18 | 748-0226 | | Hex Flange Bearing .503" I.D. | |
| 19 | 08774 | —462 | Bottom Frame Ass'y. | |
| 20 | 736-0329 | | L-Wash. ¼" I.D.* | |
| 21 | 712-0287 | | Hex Nut ¼-20 Thd.* | |
| 22 | 712-0287 | | Hex Nut ¼-20 Thd.* | |
| 23 | 736-0329 | | L-Wash. ¼" I.D.* | |
| 24 | 08772 | —462 | Pulley Cover | |
| 25 | 732-0185 | | Extension Spring | |
| 26 | 754-0177 | | V-Belt ½" x 32" Lg. (Dr. Belt) | |
| 27 | 736-0235 | | Fl-Wash. .406 I.D. x 1.25" O.D. | |
| 28 | 712-0287 | | Hex Nut ¼-20 Thd.* | |
| 29 | 12587 | —462 | Spring Bracket | |
| 30 | 711-0619 | | Ferrule—¼" | |
| 31 | 747-0165 | | Control Rod—Drive | |
| 32 | 756-0254 | | V-Pulley ½" I.D. x 6.0" O.D. | |
| 33 | 714-0229 | | #2 Woodruff Key 3/32 x ½" Dia. | |
| 34 | 738-0143 | | Shld. Bolt .498 Dia. x .340" Lg. | |
| 35 | 736-0105 | | Belleville Wash. 3/8" I.D. | |
| 36 | 710-0152 | | Hex Bolt 3/8-24 x 1.00" H.T. | |
| 37 | 736-0217 | | L-Wash. 3/8" I.D. H.D. | |
| 38 | 756-0205 | | Two Step Engine Pulley | |
| 39 | 710-0158 | | Hex Bolt 5/16-24 x 1.25" Lg.* | |
| 40 | 710-0252 | | Hex Bolt ¼-20 x .75" Lg.* | |
| 41 | 712-0181 | | Hex Top L-Nut 3/8-16 Thd. | |
| 42 | 736-0329 | | L-Wash. ¼" I.D.* | |
| 43 | 712-0287 | | Hex Nut ¼-20 Thd.* | |
| 44 | 12278 | | Idler Brkt. Ass'y. with Brake Shoe | |
| 45 | 756-0199 | | Fl-Idler with Flanges 1.875 O.D. | |
| 46 | 726-0111 | | Push Cap 3/16" Rod | |
| 47 | 04563 | | Belt Clip | |
| 48 | 712-0116 | | Hex Inserted L-Nut 3/8-24 Thd. | |
| 49 | 08324 | —462 | Belt Guard | |
| 50 | 12582 | —462 | Frame Ass'y. Comp. | |
| 51 | 09925 | | Sheave Ass'y.—4" Dia. (Blade Spindle) | |
| 52 | 736-0921 | | L-Wash. ½" Scr.* | |
| 53 | 712-0922 | | Hex Jam Nut ½-20 Thd. | |
| 54 | 09371 | | Brake Lever | |
| 55 | 736-0108 | | Fl-Wash. .510" I.D. x .750" O.D. | |
| 56 | 738-0234 | | Shld. Bolt .500" Dia. x .295 | |
| 57 | 732-0158 | | Blade Tension Spring | |
| 58 | 754-0109 | | V-Belt ½" x 43" Lg. | |
| 59 | 747-0168 | | Control Rod—Idler | |
| 60 | 748-0108 | | Flange Brg. .503 I.D.† | |
| 61 | 07957 | | Pinion Shaft Ass'y. | |
| 62 | 710-0206 | | Hex Bolt ¼-20 x .87" Lg.* | |
| 63 | 12591 | | Drive Ass'y. Comp. | |

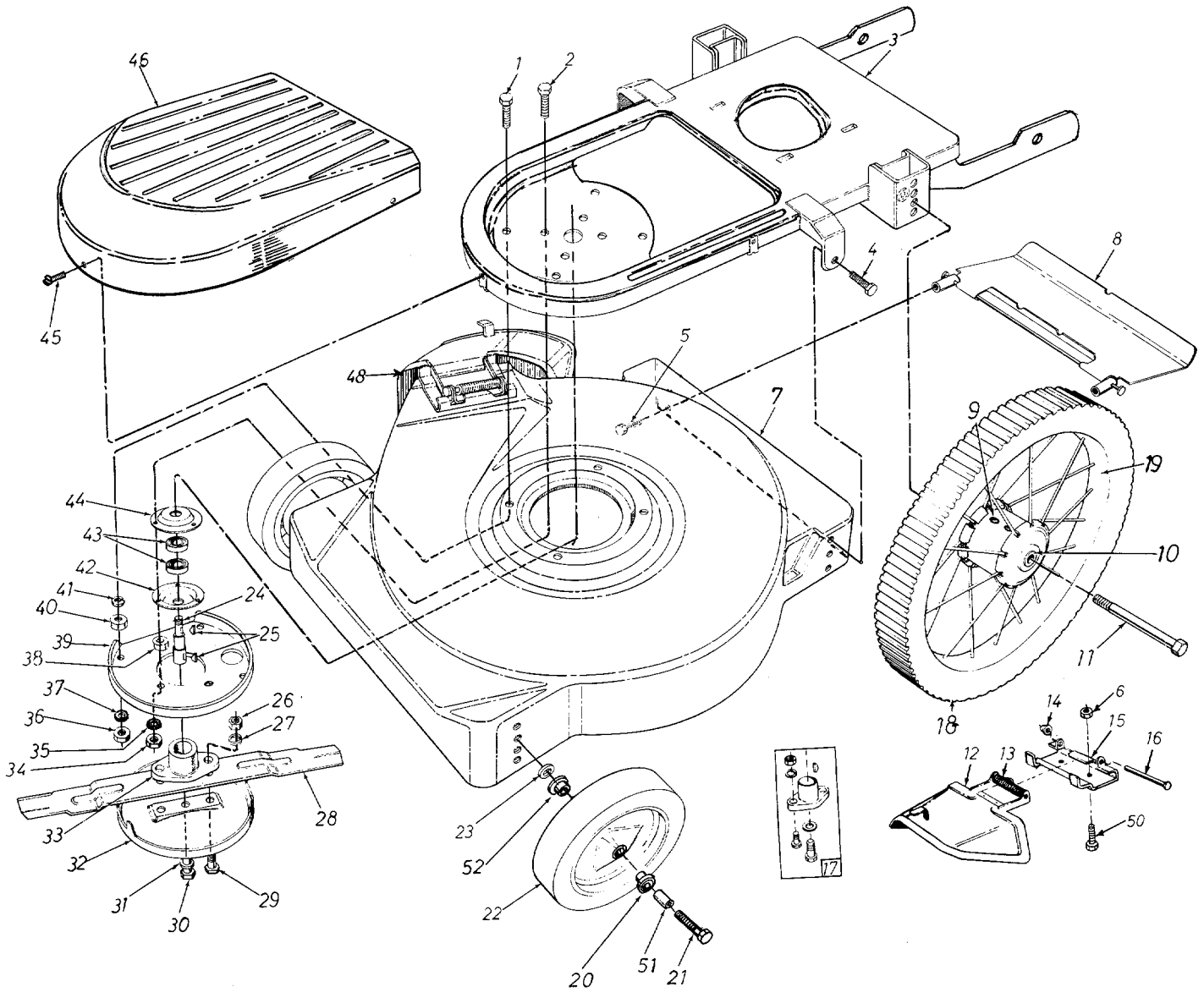
*For faster service, obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

(462—Red Flake) When ordering parts, if color or finish is important, use the appropriate color code shown at left. (e.g. Red Flake Finish—11992 (462).)

†Order Kit 753-0218

The engine is not under warranty by the mower manufacturer. If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines — Gasoline."

# 121-550A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# 121-550A

## PARTS LIST FOR MODEL 121-550A

| REF. NO. | PART NO. | COLOR CODE | DESCRIPTION | NEW PART |
|---|---|---|---|---|
| 1 | 710-0158 | | Hex Bolt 5/16-24 x 1.25" Lg.* | |
| 2 | 710-0158 | | Hex Bolt 5/16-24 x 1.25" Lg.* | |
| 3 | 12582 | —462 | Frame Ass'y. Comp. | |
| 4 | 710-0209 | | Hex Sems Bolt 3/8-16 x .62" Lg.* | |
| 5 | 710-0567 | | Hex Sems Bolt ¼-28 x .62" Lg. | |
| 6 | 712-0287 | | Hex Nut ¼-20 Thd.* | |
| 7 | 12422 | —462 | Deck Ass'y. | |
| 8 | 11197 | —462 | Rear Protective Shield Ass'y. Comp. | |
| 9 | 718-0132 | | Oil Cap | |
| 10 | 741-0113 | | Ball Brg. .504" I.D. x 1.38" Dia. | |
| 11 | 738-0114 | | Shld. Bolt .498" Dia. x 4.755" | |
| 12 | 11679 | —462 | Chute Deflector Ass'y. | |
| 13 | 732-0253 | | Torsion Spring | |
| 14 | 726-0106 | | Push Nut ¼" Rod | |
| 15 | 11130 | —462 | Adapter Plate | |
| 16 | 711-0555 | | Pivot Pin | |
| 17 | 10769 | | Blade Adapter Kit | |
| 18 | 734-0438 | | 16" Rear Wheel Ass'y.—Comp. | |
| 19 | 734-0180 | | 16" Rear Wheel—Less Tire | |
| | 734-0391 | | Semi Pneumatic Tire 16 x 1.75 Gear Tread | |
| 20 | 741-0267 | | Ball Bearing | |
| 21 | 710-0427 | | Hex Bolt 3/8-16 x 2.00" Lg.* | |
| 22 | 734-0643 | | Front Wheel Ass'y. Comp. | |
| 23 | 736-0105 | | Belleville Wash. 3/8" I.D. | |
| 24 | 738-0251 | | Blade Spindle | |
| 25 | 714-0365 | | #6 Hi-Pro Key 5/32 x 5/8" Dia. | |
| 26 | 712-0123 | | Hex Nut 5/16-24 Thd.* | |
| 27 | 736-0119 | | L-Wash. 5/16" I.D.* | |
| 28 | 742-0125 | | 22" Blade | |
| 29 | 710-0117 | | Hex Bolt 5/16-24 x 1.00" H.T. | |
| 30 | 710-0459 | | Hex Bolt 3/8-24 x 1.50" H.T. | |
| 31 | 736-0217 | | L-Wash. 3/8" I.D. H.D. | |
| 32 | 07919 | | Scalp Plate | |
| 33 | 10769 | | Blade Adapter Kit | |
| 34 | 712-0123 | | Hex Nut 5/16-24 Thd.* | |
| 35 | 736-0119 | | L-Wash. 5/16" I.D.* | |
| 36 | 712-0123 | | Hex Nut 5/16-24 Thd.* | |
| 37 | 736-0119 | | L. Wash. 5/16" I.D.* | |
| 38 | 712-0123 | | Hex Nut 5/16-24 Thd.* | |
| 39 | 12281 | | Blade Reinforcement Plate | |
| 40 | 712-0123 | | Hex Nut 5/16-24 Thd.* | |
| 41 | 736-0119 | | L-Wash. 5/16" I.D.* | |
| 42 | 08253 | | Bearing Housing | |
| 43 | 741-0919 | | Ball Brg. .787" I.D. x 1.85" O.D. | |
| 44 | 08253 | | Bearing Housing | |
| 45 | 710-0352 | | Hex B-Tap Scr. 1/4 x .38" Lg. | |
| 46 | 08295 | | Blade Spindle Cover | |
| 48 | 11679 | —462 | Chute Deflector Ass'y.—Comp. | |
| 49 | 741-0177 | | Blade Spindle Ass'y—Comp. (Incl. Ref. #24, 42, 43, 44) | |
| 50 | 710-0252 | | Hex Bolt ¼-20 x .75" Lg.* | |
| 51 | 750-0434 | | Spacer | |
| 52 | 741-0484 | | Ball Bearing | |

*For faster service obtain standard nuts, bolts, and washers locally. If these items cannot be obtained locally, order by part number and size as shown on the parts list.

(462—Red Flake) When ordering parts, if color or finish is important, use the appropriate color code shown at left. (e.g. Red Flake Finish—11992 (462).)

The engine is not under warranty by the mower manufacturer. If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines — Gasoline."

# PARTS INFORMATION

**POWER EQUIPMENT PARTS AND SERVICE**

Parts and service for all MTD manufactured power equipment are available through the authorized service firms listed below. All orders should specify the model number of your unit, part numbers, description of parts and the quantity of each part required.

**BRIGGS AND STRATTON, TECUMSEH AND PEERLESS PARTS AND SERVICE**

Briggs & Stratton, Tecumseh and Peerless parts and service should be handled by your nearest authorized engine service firm. Check the yellow pages of your telephone directory under the listing **Engines—Gasoline,** Briggs & Stratton or Tecumseh Lauson.

NOTE: If any parts are found to be missing or defective upon assembly of this unit, write to advise the factory so that immediate replacement can be made.

**ALABAMA**
Auto Electric & Carburetor Co. — BIRMINGHAM — 2625 4th Ave. S. — 35233

**ARKANSAS**
Mity Mite Motors, Inc. — FORT SMITH — 4515 S. 16th St. — 72901
Sutton's Lawn Mower Shop — NORTH LITTLE ROCK — Rt. 4, Box 368 — 72117

**CALIFORNIA**
Billious — PORTERVILLE — 75 North D Street — 93257
J.W. Jewett Co. — SAN FRANCISCO — 981 Folsom St. — 94107

**COLORADO**
Colorado Outdoor Power Equip. — DENVER — 527 West Evans — 80223

**FLORIDA**
Radco Distributors — JACKSONVILLE — 4909 Victor St. Box 5459 — 32207
Small Eng. Dist. — OPA LOCKA — 2351 N.W. 147th St. — 33054

**GEORGIA**
East Point Cycle & Key — EAST POINT — 2834 Church St. — 30344

**ILLINOIS**
Keen Edge Co. — LYONS — 8615 Ogden Ave. — 60534

**INDIANA**
Parts & Sales Inc. — ELKHART — 2101 Industrial Pkwy. — 46514

**IOWA**
Power Lawn & Garden Equip. — DUBUQUE — 2551 J.F. Kennedy — 52001

**LOUISIANA**
Suhren Engine Co. — NEW ORLEANS — 8330 Earhart Blvd. — 70118

**MARYLAND**
Center Supply Co. — TAKOMA PARK — 6867 New Hampshire Ave. — 20012

**MASSACHUSETTS**
Morton B. Collins Co. — SPRINGFIELD — 300 Birnie Ave. — 01107

**MICHIGAN**
Lorenz Service Co. — LANSING — 2500 S. Pennsylvania — 48910
Power Equipment Dist. — MOUNT CLEMENS — 36463 South Gratiot — 48043

**MINNESOTA**
Hance Distributing Inc. — HOPKINS — 420 Excelsior Ave. W. — 55343

**MISSISSIPPI**
Biloxi Sales & Service, Inc. — BILOXI — 506 Caillavet St. — 39533

**MISSOURI**
Automotive Equip. Service — KANSAS CITY — 3117 Holmes St. — 64109
Ross-Frazier Supply Co. — ST. JOSEPH — 8th and Monterey — 64503
Henzler, Inc. — ST. LOUIS — 2015 Lemay Ferry Road — 63125

**NEW JERSEY**
Lawnmower Parts Inc. — BELLMAWR — 717 Creek Rd. — 08030

**NEW YORK**
Gamble Dist., Inc. — CARTHAGE — West End Ave. — 13619

**NORTH CAROLINA**
Smith Hardware Co. — GOLDSBORO — 515 N. George St. — 27530
Dixie Sales Company — GREENSBORO — 335 N. Green — 27402

**OHIO**
Stebe's Mid-State Mower Supply — CARROLL — Box 366, 71 High St. — 43112
Bleckrie, Inc. — CLEVELAND — 7900 Lorain Ave. — 44102
National Central — WADSWORTH — 687 Seville Rd. — 44281
Burton Supply Co. — YOUNGSTOWN — 1301 Logan Ave. Box 929 — 44501

**OKLAHOMA**
Victory Motors, Inc. — MUSKOGEE — 605 S. Cherokee — 74401
Forest Sales Inc. — OKLAHOMA CITY — 6415 N. Olie — 73116

**OREGON**
Kenton Supply Co. — PORTLAND — 8216 N. Denver Ave. — 97217

**PENNSYLVANIA**
Stull Equipment Corp. — CHESTER — 742 W. Front St. — 19013
EECO Inc. — HARRISBURG — 4021 N. 6th St. — 17110
Thompson Rubber Co. — PHILADELPHIA — 5222-24 N. Fifth St. — 19120
Bluemont Co. — PITTSBURGH — 11125 Frankstown Rd. — 15235
Frank Roberts & Sons — PUNXSUTAWNEY — R.D. 2 — 15767

**TENNESSEE**
Master Repair Service — KNOXVILLE — 2000 Western Ave. — 37921
American Sales & Service, Inc. — MEMPHIS — 3035-43 Bellbrook — 38116

**TEXAS**
Marr Brothers, Inc. — DALLAS — 423 E. Jefferson — 75203
Woodson Sales Corp. — FORT WORTH — 1702 N. Sylvania — 76111
Bullard Supply Co. — HOUSTON — 2409 Commerce St. — 77003
Catto & Putty, Inc. — SAN ANTONIO — 414 Live Oak — 78298

**UTAH**
A-1 Engine & Mower Co. — SALT LAKE CITY — 437 E. 9th St. — 84111

**VERMONT**
Vermont Hdwe. Co. Inc. — BURLINGTON — 180 Flynn Ave. — 05401

**VIRGINIA**
RBI Corp. — RICHMOND — 963 Myers St. — 23260

**WASHINGTON**
Bailey's Inc. — SEATTLE — 1414 14th Ave. — 98102

**WEST VIRGINIA**
Young's, Inc. — CHARLESTON — 233 Virginia St., E. — 25301

**WISCONSIN**
Power Pac — MARSHFIELD — 301 E. 29th St. — 54449

**WARRANTY PARTS AND SERVICE POLICY**

The purpose of warranty is to protect the customer from defects in workmanship and materials, defects which are NOT detected at the time of manufacture. It does not provide for the unlimited and unrestricted replacement of parts. Use and maintenance are the responsibility of the customer. The manufacturer cannot assume responsibility for conditions over which it has no control. Simply put, if it's the manufacturer's fault, it's the manufacturer's responsibility; if it's the customer's fault, it's the customer's responsibility.

**CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES:**

1. **Replacement of Missing Parts** on new equipment.
2. **Replacement of Defective Parts** within the warranty period.
3. **Repair of Defects** within the warranty period.

All claims MUST be substantiated with the following information:

1. **Model Number** of unit involved.
2. **Date** unit was purchased or first put into service.
3. **Date of failure.**
4. **Nature of failure.**